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ACTIVITIES OF THE UNITED NATIONS SYSTEM IN THE FIELD OF WATER RESOURCES

Report of the Secretary-General

SUMMARY

This report presents in summary form the activities of the organizations of the United Nations system in the field of water resources. It describes the various coordination mechanisms - in particular, the ACC Intersecretariat Group for Water Resources, the Steering Committee for Water Supply and Sanitation, and the Collaborative Council for Water Supply and Sanitation, at the global level, and the inter-agency mechanisms established by ECA and ESCAP at the regional level. It also outlines the nature of the joint activities being undertaken by the organizations concerned with regard to information management, water resources and urban development, integrated rural water management, and integrated water resources development and management, and provides information concerning meetings, conferences and symposia held during the past three years. It draws attention to the outcomes of the Global Consultation on Safe Water for the 1990s, the Symposium on Strategy for Water Resources Capacity-building, and the International Conference on Water and the Environment.

* E/C.7/1993/1.

CONTENTS

	Paragraphs	Page
INTRODUCTION	1 - 2	3
I. ACTIVITIES OF THE UNITED NATIONS SYSTEM IN WATER RESOURCES	3 - 7	3
II. COORDINATION OF THE ACTIVITIES OF THE UNITED NATIONS SYSTEM IN WATER RESOURCES	8 - 21	6
A. Coordination at the global level	8 - 15	6
B. Coordination at the regional level	16 - 17	8
C. Joint efforts related to the Mar del Plata Action Plan and to Agenda 21	18 - 21	8
III. MEETINGS, SEMINARS AND CONFERENCES CONVENED BY THE ORGANIZATIONS OF THE UNITED NATIONS SYSTEM	22 - 40	10
A. Global Consultation on Safe Water and Sanitation for the 1990s	23	10
B. Symposium on Strategy for Water Resources Capacity-building	24 - 27	10
C. International Conference on Water and the Environment	28 - 40	12

Annexes

I.	INVOLVEMENT OF THE ORGANIZATIONS OF THE UNITED NATIONS SYSTEM IN THE FIELD OF WATER RESOURCES	17
II.	OTHER ARRANGEMENTS FOR SYSTEM-WIDE COORDINATION	21
III.	MEETINGS, SEMINARS, SYMPOSIA AND CONFERENCES HELD DURING 1990-1992	23

INTRODUCTION

1. The present report presents an overview of the involvement of the organizations of the United Nations system in the field of water resources. Section I reviews the scope and nature of the involvement; section II describes the existing arrangements for system-wide cooperation at the global and regional levels, and section III provides information on key conferences and meetings that took place during the period 1990-1992. Particular attention is given to the outcome of the International Conference on Water and the Environment, held in Dublin, Ireland from 26 to 31 January 1992, which had the objective of providing technical inputs to the chapter on fresh-water resources in Agenda 21. 1/

2. The activities of each organization are set in accordance with their specific mandates, and their programmes as authorized by their respective intergovernmental bodies. Consequently, section I of the report endeavours to discuss the nature and complexities of the interrelationships between programmes of the various organizations rather than describe the actual programmes. This review is supplemented by a conference room paper entitled "The United Nations organizations and water", which provides more detailed information as to the programmes of each organization.

I. ACTIVITIES OF THE UNITED NATIONS SYSTEM IN WATER RESOURCES

3. Twenty-one organizations within the United Nations system, including the regional commissions, are active, to various degrees and through various means, in the field of water resources. These organizations are:

United Nations

United Nations Secretariat, Department of Economic and Social Development

United Nations Children's Fund (UNICEF)

United Nations Development Programme (UNDP)

United Nations Environment Programme (UNEP)

United Nations University (UNU), Programme on Natural Resources in Africa

Economic Commission for Africa (ECA)

Economic Commission for Europe (ECE)

Economic Commission for Latin America and the Caribbean (ECLAC)

Economic and Social Commission for Asia and the Pacific (ESCAP)

Economic and Social Commission for Western Asia (ESCWA)

United Nations Centre for Human Settlements (HABITAT)

Office of the United Nations Disaster Relief Coordinator (UNDRO)

International Research and Training Institute for the Advancement of Women (INSTRAW)

World Food Programme (WFP)

Specialized agencies and related organizations

Food and Agriculture Organization of the United Nations (FAO)

United Nations Educational, Scientific and Cultural Organization (UNESCO)

World Health Organization (WHO)

World Bank

World Meteorological Organization (WMO)

United Nations Industrial Development Organization (UNIDO)

International Atomic Energy Agency (IAEA).

4. Table 1 below provides a synoptic view of the areas of concern of each of the organizations. Activities have been divided into eight specific sectors: agricultural water use; drinking water supply; industrial water use; hydropower; navigation; flood control; drought management; and multipurpose water use. The inclusion of an organization in any given cell represents interest or concern with that sector and not necessarily specific ongoing activities at any given time.

Table I. Involvement of the organizations of the United Nations system in the field of water resources

Organization	Agricultural water use	Drinking water supply	Industrial water use	Hydro	Navigation	Flood control	Drought management	Multi-purpose
Secretariat	X	X	X	X	X	X	X	X
UNICEF		X						
UNDP	X	X	X	X	X	X	X	X
UNEP	X	X	X			X	X	X
UNU	X	X	X	X	X	X	X	X
ECA	X	X	X	X	X	X	X	X
ECE	X	X	X	X	X	X		X
ECLAC	X	X	X	X	X	X	X	X
ESCAP	X	X	X	X	X	X	X	X
ESCWA		X				X	X	X
HABITAT		X	X			X		X
UNDRO						X		
INSTRAW	X	X		X				X
WFP	X	X				X	X	X
FAO	X					X	X	
UNESCO				X		X	X	X
WHO	X	X	X					X
World Bank	X	X	X	X	X	X	X	X
WMO						X	X	X
UNIDO			X	X				X
IAEA	X		X					X

5. A more detailed presentation of the nature of the involvement of the organizations is presented in annex I, which combines the eight activities outlined above into a matrix with 15 development and management functions - namely: surface water hydrology; groundwater hydrology; surface water quality monitoring; groundwater quality monitoring; information on water use; surface water development; groundwater development; waste water reuse; integrated water resources management; water use management; waste water management; strengthening of institutions; legislation; education and training; and human resources development.

6. As shown in the annex, there is a complex interrelationship among the organizations of the United Nations systems in the field of water resources. Each organization brings a different point of view either in terms of the nature of the substance, the geographical coverage, or both. Because the field of water resources could not possibly be divided into mutually exclusive categories, the mandates of the various organizations inevitably contain numerous grey areas, leading to overlap and at times to duplication. At the same time, however, the very fact that organizations bring a variety of perspectives to the field offers opportunities for bringing about a complementarity of approaches in a synergetic manner.

7. The preparatory work for the United Nations Water Conference, held in Mar del Plata, Argentina, in 1977, and recommendations contained in the Mar del Plata Action Plan, 2/ provided the basis for increased efforts for coordination and cooperation. These efforts have been conducted in terms of the implementation of the Action Plan, the International Drinking Water Supply and Sanitation Decade, and the preparatory process for the United Nations Conference on Environment and Development.

II. COORDINATION OF THE ACTIVITIES OF THE UNITED NATIONS SYSTEM IN WATER RESOURCES

A. Coordination at the global level

1. ACC Intersecretariat Group for Water Resources

8. In 1979, after the United Nations Water Conference (1977), and pursuant to Economic and Social Council resolution 1979/68, in which the Council urged the Administrative Committee on Coordination (ACC) to make the necessary arrangements to intensify interorganizational coordination and cooperation in the field of water resources, the ACC Intersecretariat Group for Water Resources was established, with the following terms of reference:

(a) Cooperation in the monitoring of the progress being made in the implementation by Governments of the Action Plan adopted by the United Nations Water Conference. The Group serves as a focal point at the global level for the gathering, analysis and synthesis of information in order to furnish the relevant governing bodies of the organizations concerned with the necessary information to undertake their reviews of the progress in the implementation of the Mar del Plata Action Plan. Examples in this respect are the report presented to the General Assembly at its forty-fifth session (1990), on the achievements of the International Drinking Water Supply and Sanitation Decade, 1981-1990 (A/45/327), and the report to the Committee on Natural Resources at

is twelfth session (25 March-5 April 1991) on strategies and measures for the implementation of the Mar del Plata Action Plan in the 1990s (E/C.7/1991/8);

(b) Promotion of cooperation and joint planning of the water-related programmes of the United Nations system and review of their implementation. The Group is entrusted with the responsibility of drawing up system-wide plans encompassing joint action by the many organizations concerned. It is also responsible for determining the issues of current significance to be covered in the relevant reports;

(c) Assistance in coordinating the water-related activities of the United Nations system at the country and regional levels.

9. The Group has been instrumental in promoting cooperation in the implementation of the Mar del Plata Action Plan. In particular, it provided the vehicle for the formulation of a strategy for the implementation of the Action Plan in the 1990s, the organization of the International Conference on Water and the Environment (Dublin, Ireland, 26-31 January 1992), and the provision of inputs by the organizations of the system to the drafting of chapter 18 of Agenda 21 1/ of the United Nations Conference on Environment and Development, concerning fresh-water resources.

10. A formal session of the Group is held once a year, and ad hoc informal meetings of the Group or its working groups are convened as needs arise.

2. Steering Committee for Water Supply and Sanitation

11. After the launching in 1980 of the International Drinking Water Supply and Sanitation Decade, the Steering Committee for Cooperative Action for the International Drinking Water Supply and Sanitation Decade was established. At the end of the Decade, the Committee evolved into the Steering Committee for Water Supply and Sanitation, with a view to continuing the momentum gathered during the Decade. The Steering Committee is designed to promote water supply and sanitation at the global level; assess needs and monitor progress towards the achievement of national, regional and global objectives; and ensure effective consultation among the organizations of the system. The Steering Committee also provides a link with the Collaborative Council for Water Supply and Sanitation.

12. In view of the inextricable connection between issues relating to drinking water supply and sanitation and to other competing uses in a holistic approach to water resources development and management, there exists a close relationship between the Steering Committee for Water Supply and Sanitation and the Intersecretariat Group for Water Resources. Normally, the meetings of the Steering Committee are held in conjunction with those of the Intersecretariat Group, and its main conclusions and agreements are reported to the latter.

3. Other mechanisms for global coordination

13. Apart from the ACC Intersecretariat Group and the Steering Committee, other arrangements, involving two or more organizations of the system, exist to deal with specific aspects of water resources. They are summarized in annex II.

4. Collaborative Council for Water Supply and Sanitation

14. In addition to the above-mentioned mechanisms within the United Nations system, mention needs to be made of the Collaborative Council for Water Supply and Sanitation in view of the innovative role it plays in promoting cooperation in this field between the organizations of the system and other organizations.

15. The membership of the Collaborative Council includes, in addition to the organizations of the United Nations system active in the field of water supply and sanitation, a wide spectrum of external support agencies, intergovernmental and non-governmental organizations, and professional organizations. The Council meets every two years. It has an independent secretariat financed jointly by UNDP and external support agencies and is housed at WHO headquarters in Geneva. Priority attention is given by the Council to the promotion of collaboration among sector professionals, provision of assistance in the creation of greater public awareness of sector needs, encouraging applied research, supporting investigation of specific sector issues, and the provision of appropriate forums for the discussion of sector issues. The Council has established working groups on information, education and communication, information management, applied research, gender issues in the water supply and sanitation sector, urbanization, and operation and maintenance.

B. Coordination at the regional level

16. Subsequent to the United Nations Water Conference, the Economic and Social Council adopted resolution 1979/67 on institutional arrangements for international cooperation at the regional level in the implementation of the Mar del Plata Action Plan.

17. In response to the resolution, in 1978 ESCAP established the Interagency Task Force on Water for Asia and the Pacific. The Task Force meets twice a year to coordinate water-related activities undertaken in the region by the organizations concerned. Following an inter-agency meeting convened in Addis Ababa in July 1992 ECA established the Interagency Group for Water Resources Activities in Africa. The Group's aim is to coordinate and harmonize water resources activities in Africa at the subregional and regional levels; promote collaboration and joint activities; and gather, compile and disseminate information on water resources activities in Africa.

C. Joint efforts related to the Mar del Plata Action Plan and to Agenda 21

18. The report of the Secretary-General to the Committee on Natural Resources at its twelfth session, "Strategies and measures for the implementation of the Mar del Plata Action Plan in the 1990s", summarized the analyses, conclusions and recommendations that stemmed from a series of regional assessments conducted on critical issues relating to the implementation of the Plan. It was undertaken with the financial support of UNDP and with the full participation of the regional commissions. The regional assessments concentrated on water resources assessment (with WMO and UNESCO as lead agencies); water quality (with WMO/UNEP as lead agencies), water for agriculture (with FAO as the lead agency), and water resources management (with

the former Secretariat Department of Technical Cooperation for Development and the regional commissions acting as the lead agencies). In addition, a study on Capacity-building, dealing with issues relating to institutional arrangements and human resources development, was completed by UNDP on behalf of the ACC Intersecretariat Group.

19. The regional studies on water resources assessment, water quality and water for agriculture were followed by meetings with experts in order to review the results and formulate recommendations. In addition, an International Action Programme on Water and Sustainable Agricultural Development was formulated by FAO, in consultation with a number of experts, organizations of the United Nations system and bilateral organizations. In June 1991, UNDP, in cooperation with the International Institute for Hydraulic and Environmental Engineering, convened, in Delft, Netherlands, a symposium "A Strategy for Water Resources Capacity Building". The Delft Declaration contains a set of action recommendations concerning capacity-building. The Global Consultation on Safe Water and Sanitation for the 1990s (New Delhi, India, September 1990) and the report of the Secretary-General on the achievements of the International Drinking Water Supply and Sanitation Decade, 1981-1990 (A/45/327), prepared in consultation with the organizations concerned, made a number of recommendations for action into the 1990s with regard to drinking water supply and sanitation.

20. The International Conference on Water and the Environment, organized by the organizations of the United Nations system focused its attention on six main issues - namely, integrated water resources development and management; water resources assessment and the impact of climate change on water resources; protection of water resources, water quality and aquatic ecosystems; water and sustainable urban development and drinking water supply and sanitation in an urban context; water for sustainable food production and rural development and drinking water supply and sanitation in a rural context; and mechanisms for implementation and coordination at the international, national and local levels. Similarly, chapter 18 of Agenda 21 1/ focuses on issues relating to integrated water resources development and management; water resources assessment; protection of water resources, water quality and aquatic ecosystems; drinking water supply and sanitation; water for sustainable urban development; water for sustainable food production and rural development; and the impact of climate change on water resources. In both cases, questions related to capacity-building were considered under each issue.

21. As a follow-up to the activities carried out in connection with the formulation of the strategy for the 1990s, and pursuant to Agenda 21, the members of the ACC Intersecretariat Group for Water Resources are continuing their joint efforts through working groups on information management (E/C.7/1993/7) and on water resources and urban development. The latter working group, under the chairmanship of HABITAT and with the participation of WHO, World Bank, UNESCO and UNDP, is entrusted with recommending options for inter-agency collaboration in implementing follow-up activities on urban water issues stemming from Agenda 21. Its main objective will be to identify policy orientations, objectives, target groups, and the scope and coverage of programmes and activities and their relation to the issues emerging from Agenda 21. In addition, with regard to rural development, FAO, jointly with WHO, UNDP, UNICEF and the World Bank, is convening an expert consultation on integrated rural water management, to be held at FAO headquarters from 15 to 19 March 1993. The objectives of the expert consultation will be to develop

strategies to promote integrated rural water resources planning and development, identify priority areas for technical assistance to developing countries and prepare guidelines for integrated rural water resources management. With regard to integrated water resources development and management, the Department of Economic and Social Development and the World Bank were entrusted with the task of preparing an outline for a strategy for the management of water resources as a basis for sustainable development.

III. MEETINGS, SEMINARS AND CONFERENCES CONVENED BY THE ORGANIZATIONS OF THE UNITED NATIONS SYSTEM

22. Annex III lists various meetings, seminars, symposia and conferences convened by the organizations of the United Nations system, either individually or jointly, during the period 1990-1992. All of the meetings covered a wide variety of subjects of either a sectoral or a multidisciplinary nature.

A. Global Consultation on Safe Water and Sanitation for the 1990s

23. The Global Consultation on Safe Water and Sanitation for the 1990s was sponsored by UNDP in cooperation with other organizations of the system and hosted by the Government of India. The Consultation, which was held in New Delhi from 10 to 14 September 1990, had as its major objective promoting awareness of the main issues to be faced with regard to water supply and sanitation in the 1990s and to reach a consensus on strategic actions needed to accelerate progress. It produced the New Delhi Statement which was submitted to the General Assembly at its forty-fifth session during its discussions of the achievements of the International Drinking Water Supply and Sanitation Decade (A/45/C.2/3). In resolution 45/181 of 21 December 1990 the General Assembly endorsed the four principles contained in the Statement, as follows:

(a) Protection of the environment and safeguarding of health through the integrated management of water resources and liquid and solid wastes;

(b) Institutional reforms promoting an integrated approach and including changes in procedures, attitudes and behaviour, and the full participation of women at all levels in sector institutions;

(c) Community management of services, backed by measures to strengthen local institutions in implementing and sustaining water and sanitation programmes;

(d) Sound financial practices, achieved through better management of existing assets, and widespread use of appropriate technologies.

B. Symposium on Strategy for Water Resources Capacity-building

24. Issues concerning human resources and institutional development were dealt with at the Symposium on a Strategy for Water Sector Capacity-building, convened by UNDP in Delft, the Netherlands, from 3 to 5 June 1991, and hosted by the International Institute for Hydraulic Engineering. The symposium

stressed the concept of water as a finite resource. It noted that the scarcity of the resource, the threats of water resources development to the environment and the conflicting interests of the water users imply that water resources planning and management should be an integral part of overall national economic planning. The objectives and strategies for the water sector should be derived from the national planning process.

25. Capacity-building was defined at the symposium as containing the following three basic elements:

(a) Creating an enabling environment with appropriate policy and legal frameworks;

(b) Institutional development, including community participation;

(c) Human resources development and the strengthening of managerial systems.

26. With regards to a strategy for water sector capacity-building, the Delft Declaration states that it involves the following approaches:

> "Developing improved policy and legal frameworks, institutional development and a commitment to development of human resources and managerial systems for the sector;
>
> Managing water and environmental resources, including modifying demand by pricing, conservation, reclamation and reuse of waste water, thereby reducing fresh water demands and pollution;
>
> Having the ESAs [External Support Agencies] adopt capacity-building as an essential element of their assistance efforts, including such initiatives as supporting community and water user associations, on farms and in the cities, so that they can participate productively in investments made on their behalf; continued attention needs to be given to the pivotal role of women in water related activities, and their proven capabilities to fulfil managerial tasks at all levels;
>
> Urging governments to coordinate ESA activities in their countries, and encouraging the ESAs themselves to coordinate their agendas;
>
> Involving, where appropriate, the private sector in managing or providing water related services;
>
> Encouraging local and foreign universities, institutes, consulting organizations, professional associations and others to participate in capacity-building as is most appropriate to their own capacities; and ESAs are urged to facilitate this effort;
>
> Encouraging countries to conduct water sector assessments; these assessments must include the need for capacity-building in addition to traditional technical, social and economic aspects; and
>
> Creating awareness of the vital role and finiteness of water on the part of decision-makers and the public at large." 3/

27. The Symposium recognized that "each country and region has its specific characteristics and requirements with respect to its water resources situation and its institutional framework. Therefore operational strategies must be tailor-made. To achieve this it is recommended that, based on the insights emerging from this Symposium, water sector assessments be initiated to provide a basis for country strategies." 4/

C. International Conference on Water and the Environment

28. The International Conference on Water and the Environment: Development Issues for the 21st Century, was convened in Dublin, Ireland, from 26 to 31 January 1992. The Conference was attended by government-designated experts and was part of the preparatory process for the United Nations Conference on Environment and Development. Its main objectives were to assess the current status of the world's fresh-water resources in relation to present and future water demands and to identify priority issues for the 1990s; to develop coordinated intersectoral approaches to managing those resources by strengthening the linkages between the various programmes; to formulate environmentally sustainable strategies and action programmes for the 1990s and beyond to be presented to the Earth Summit; and to bring the above issues, strategies and actions to the attention of Governments as a basis for national programmes and to increase awareness of the environmental consequences and developmental opportunities in improving the management of water resources.

29. The subject areas of the Conference, coincided with those of chapter 18 of Agenda 21, with minor differences in treatment. The Conference dealt with drinking water supply and sanitation in the context of water and sustainable urban development and water and sustainable food production and rural development. Issues concerning the impact of climate change on water resources were included under water resources assessment. Chapter 18 of Agenda 21, on the other hand, has separate sections for drinking water supply and sanitation and for the impact of climate change on water resources.

30. The Conference recognized that "Scarcity and misuse of fresh water pose a serious and growing threat to sustainable development and protection of the environment. Human health and welfare, food security, industrial development and the ecosystems on which they depend, are all at risk, unless water and land resources are managed more effectively in the present decade and beyond than they have been in the past". 5/ Consequently, the participants at the Conference recognized the need for fundamental new approaches to development and management which can only be brought about through political commitment and involvement from the highest levels of government to the smallest communities. They agreed on the need for concerted action to reverse the present trends of overconsumption, pollution and rising threats from droughts and floods, and set out recommendations for action at local, national and international levels based on the following four principles:

1. "Fresh water is a finite and vulnerable resource, essential to sustain life, development and the environment.

"Since water sustains life, effective management of water resources demands a holistic approach, linking social and economic development with

protection of natural ecosystems. Effective management links land and water uses across the whole of a catchment area or groundwater aquifer.

2. "Water development and management should be based on a participatory approach, involving users, planners and policy-makers at all levels.

"The participatory approach involves raising awareness of the importance of water among policy-makers and the general public. It means that decisions are taken at the lowest appropriate level, with full public consultation and involvement of users in the planning and implementation of water projects."

3. "Women play a central part in the provision, management and safeguarding of water.

"This pivotal role of women as providers and users of water and guardians of the living environment has seldom been reflected in institutional arrangements for the development and management of water resources. Acceptance and implementation of this principle requires positive policies to address women's specific needs and to equip and empower women to participate at all levels in water resources programmes, including decision-making and implementation, in ways defined by them."

4. "Water has an economic value in all its competing uses and should be recognized as an economic good.

"Within this principle, it is vital to recognize first the basic right of all human beings to have access to clean water and sanitation at an affordable price. Past failure to recognize the economic value of water has led to wasteful and environmentally damaging uses of the resource. Managing water as an economic good is an important way of achieving efficient and equitable use, and of encouraging conservation and protection of water resources." 6/

31. The participants formulated recommendations based on the four principles focusing on the alleviation of poverty, protection against natural disasters, water conservation and reuse, sustainable urban development, agricultural production and rural water supply, protecting aquatic ecosystems, resolving water conflicts, the enabling environment, the knowledge base, and capacity-building.

32. The report of the Dublin Conference, including the Dublin Statement, was submitted to the Preparatory Committee of the United Nations Conference on Environment and Development at its fourth session. The results of the Dublin Conference were not incorporated formally into the proceedings of either the Preparatory Committee or of the United Nation Conference on Environment and Development itself, since the contents of Agenda 21 are the result of a negotiated text achieved by consensus. The four principles enunciated in the Dublin Statement and some of the issues raised at Dublin on which a consensus could not be achieved at either Conference were not included in Agenda 21.

33. Yet, as can be seen by comparing Agenda 21 with the Dublin Statement, there is a close relationship between the principles and action recommendations contained in each of the subject areas of the Statement and those in chapter 18

of Agenda 21. Both recognize the importance of taking a holistic approach to water resources and the need for their integrated development and management.

34. However, the Statement is more explicit with regards to the concept of water as an economic good. Whereas Agenda 21 implicitly dwells on possible conflicts between economic efficiency considerations on the one hand, and social and environmental, considerations on the other, the Dublin Statement stresses the need to integrate these criteria into a holistic approach and advances the view that the full cost of water should be acknowledged as part of management policies incorporating economic, social and environmental criteria.

35. Thus, under the heading of objectives, paragraph 18.8 of Agenda 21 states that

> "integrated water resources management is based on the perception of water as an integral part of the ecosystem, a natural resource and a social and economic good, whose quantity and quality determine the nature of its utilization ... In developing and using water resources, priority has to be given to the satisfaction of basic needs and the safeguarding of ecosystems. Beyond these requirements, however, water users should be charged appropriately."

The Dublin Conference, by contrast, in paragraph 2.16 of its report, concerning planning, states that

> "A prerequisite for sustainable management of water as a scarce and vulnerable resource is that full costs should be acknowledged in all planning and development. Planning considerations should reflect benefits investment, environmental protection and operation costs, as well as the opportunity costs reflecting the most valuable alternative use of water. ... Charging mechanisms should, however, reflect as far as possible both the true cost of water when used as an economic good and the ability of the communities to pay".

An almost identical statement, however, is found in paragraph 18.16 of Agenda 21, under the heading "scientific and technological means".

36. In paragraph 4.16 the Dublin Conference report goes on to say that

> "Holistic water management means that all uses, including the conservation and sustainable use of living resources, are considered when making water-management decisions. This objective will be more likely to be achieved if values, direct and indirect, obvious and intrinsic, are calculated and the true cost of water is paid by the user. The payment of the true cost of water is likely to encourage water conservation, efficiency and reuse."

It goes on to say, however, that the ability of poor urban and rural people to pay should be considered in pricing water supplies for essential uses. Further on, in paragraph 6.20 (b), it states that the objective of resolving competing demands on water resources through the application of appropriate economic, legal and institutional mechanisms

"is achievable through: better integration of water use within the framework of overall national economic, agricultural and environmental policies and adoption of demand management strategies, ranging from appropriate pricing policies to implementation of relevant legal frameworks and entitlement supported by the widespread introduction of water saving technologies."

37. Both the Dublin Conference and the United Nations Conference on Environment and Development support the "polluter pays" principle. Thus, paragraph 18.40 (i) of Agenda 21 refers to the application of the "polluter pays" principle, where appropriate, to all kinds of sources, including on-site and off-site sanitation. The Dublin Statement, however, takes a broader stand and deals with the utilization of funds generated through pollution charges. In paragraph 4.11 (e), it states "Where possible, utilize economic instruments, including charges on water users and polluters and appropriate incentives, with the funds generated being utilized for waste-water treatment and reinforcement of environmental management activities in freshwater resources."

38. With regards to transboundary water resources, in paragraph 2.14, the Dublin Conference says that "In many cases, the integrated water resources development and management of transboundary water resources will raise the need for international co-operation and mechanisms at international or regional levels to facilitate inter-country agreement on the coordination of the management of such resources in an economically and environmentally sound manner." In the ensuing paragraph it goes on to state that "International law is needed to facilitate bilateral or regional agreements on transboundary integrated water resources development and management." Agenda 21, in paragraph 18.10, states that "In the case of transboundary water resources, there is a need for riparian States to formulate water resources strategies, prepare water resources action programmes and consider, where appropriate, the harmonization of those strategies and action programmes."

39. As far as water resources protection and conservation, the Dublin Conference report recommends in paragraph 4.5 (a) the "preparation of basin action plans, especially for priority high-risk basins, including their rivers, lakes, and aquifers, designated at the national level (and at international levels, for those basins that transcend international boundaries), to integrate land-use planning with water management and conservation, to coordinate the activities of provincial, national and international agencies, to address transboundary issues, and to initiate contingency plans to control accidental spills and to respond to natural disasters." Paragraph 4.11 (c) recommends the "promotion of national legislation and regional agreements, where necessary, for preventing and controlling transboundary water pollution". In paragraph 18.40 (h), Agenda 21 calls for the "development of national and international legal instruments that may be required to protect the quality of water resources, as appropriate, particularly for: (i) monitoring and control of pollution and its effects in national and transboundary waters; (ii) control of long-range atmospheric transport of pollutants; (iii) control of accidental and/or deliberate spills in national and/or transboundary water bodies; (iv) environmental impact assessment."

40. Both the Mar del Plata Action Plan and the relevant provisions of Agenda 21 provide basic mandates for action by the organizations of the United Nations system, including monitoring of the implementation of recommendations

contained in them. As can be seen from the events that have taken place since Mar del Plata, there is a need for an ongoing dialogue to bring about an evolution of concepts required to deal with changing circumstances. The Committee on Natural Resources may wish to engage in this dialogue with a view to clarifying issues, extending the consensus where agreement does not yet exist and generating new approaches to deal with issues emerging during the 1990s and beyond.

Notes

1/ See "Report of the United Nations Conference on Environment and Development, Rio de Janeiro, 3-4 June 1992" (A/CONF.151/26, annex II).

2/ See Report of the United Nations Water Conference, Mar del Plata, 14-25 March 1977 (United Nations publication, Sales No. E.77.II.A.2), chap. I.

3/ A Strategy for Water Sector Capacity Building. Proceedings of the UNDP Symposium, Delft, 3-5 June 1992 (New York, UNDP, 1992), p. 18.

4/ Ibid.

5/ International Conference on Water and the Environment, 23-31 January 1992, Dublin (Geneva, WMO), p. 3.

6/ Ibid., p. 4.

Annex I

INVOLVEMENT OF THE ORGANIZATIONS OF THE UNITED NATIONS SYSTEM IN THE FIELD OF WATER RESOURCES

	Development and management functions	Sectors							
		Agricultural water use	Drinking water supply	Industrial water use	Hydropower	Navigation	Flood Control	Drought management	Multipurpose water use
1	Surface water hydrology	Department of Economic and Social Development, UNDP, UNEP, UNU, ECA, FAO, World Bank, IAEA	Department of Economic and Social Development, UNICEF, UNDP, UNEP, UNU, ECA, ESCAP, ESCWA, INSTRAW, World Bank, HABITAT	Department of Economic and Social Development, UNDP, UNU, ECA, World Bank, HABITAT	Department of Economic and Social Development, UNDP, UNU, ECA, INSTRAW, UNESCO, World Bank	Department of Economic and Social Development, UNDP, ECA, ESCAP, World Bank	Department of Economic and Social Development, UNDP, UNU, ECA, ESCAP, ESCWA, UNESCO, FAO, WMO, World Bank, HABITAT	Department of Economic and Social Development, UNDP, UNU, ECA, ESCAP, ESCWA, UNESCO, FAO, WMO, World Bank	Department of Economic and Social Development, UNEP, UNU, ECA, ESCAP, ESCWA, World Bank, UNESCO, WMO, HABITAT, IAEA
2	Groundwater hydrology	Department of Economic and Social Development, UNDP, UNU, ECA, FAO, World Bank, IAEA	Department of Economic and Social Development, UNDP, UNU, ECA, INSTRAW, World Bank, HABITAT	UNDP, UNU, ECA, World Bank, HABITAT			UNDP, UNU, ECA, HABITAT, UNESCO, WMO	Department of Economic and Social Development, UNDP, UNU, ECA, ESCAP, UNESCO, FAO, WMO, World Bank	Department of Economic and Social Development, UNEP, UNU, ECA, ESCAP, ESCWA, HABITAT, UNESCO, WMO, World Bank, IAEA
3	Surface water quality monitoring	Department of Economic and Social Development, UNDP, UNEP, UNU, ECA, FAO, WHO, World Bank, IAEA	Department of Economic and Social Development, UNICEF, UNDP, UNU, ECA, ESCAP, UNEP, WHO, World Bank, HABITAT	Department of Economic and Social Development, UNDP, UNEP, WHO, World Bank, HABITAT, IAEA	UNDP, ECA	UNDP, ECA, ESCAP		Department of Economic and Social Development, UNDP, UNEP, UNU, ECA, UNESCO, FAO, WMO	Department of Economic and Social Development, UNU, ECA, ESCAP, UNEP, UNESCO, WHO, WMO, HABITAT, UNIDO, IAEA
4	Groundwater quality monitoring	UNDP, UNEP, ECA, FAO, WHO, World Bank, IAEA	UNICEF, UNDP, ECA, ESCAP, UNEP, WHO, World Bank, HABITAT	UNDP, UNEP, WHO, World Bank, HABITAT, IAEA				UNDP, UNEP, ECA, ESCAP, UNESCO, FAO, WMO	UNEP, ECA, ESCAP, UNESCO, WHO, WMO, HABITAT, IAEA
5	Information on water use	UNDP, UNEP, UNU, ECA, ECE, ECLAC, ESCAP, INSTRAW, FAO, World Bank	UNDP, UNEP, UNICEF, UNU, ECA, ECE, ECLAC, ESCAP, INSTRAW, WHO, World Bank, HABITAT	UNDP, UNEP, UNU, ECA, ECE, ECLAC, ESCAP, World Bank, HABITAT	UNDP, UNU, ECA, ECE, ECLAC, ESCAP, INSTRAW, World Bank	UNDP, UNU, ECA, ECE, ECLAC, ESCAP	UNDP, UNEP, UNU, ECA, ECE, ECLAC, ESCAP, UNESCO, WMO	UNDP, UNEP, UNU, ECA, ECLAC, ESCAP, UNESCO, WMO, FAO, World Bank	UNEP, UNU, ECA, ECE, ECLAC, ESCAP, INSTRAW, HABITAT, UNESCO, WMO, World Bank

Development and management functions	Sectors							
	Agricultural water use	Drinking water supply	Industrial water use	Hydropower	Navigation	Flood Control	Drought management	Multipurpose water use
6 Surface water development	Department of Economic and Social Development, UNDP, UNEP, UNU, ECA, ESCAP, FAO, WFP, World Bank	Department of Economic and Social Development, UNDP, UNEP, UNICEF, UNU, ECA, ESCAP, WHO, WFP, World Bank, HABITAT	Department of Economic and Social Development, UNDP, UNEP, ECA, World Bank, HABITAT	Department of Economic and Social Development, UNDP, ECA, ESCAP, World Bank, UNIDO	UNDP, ECA, ESCAP, World Bank	Department of Economic and Social Development, UNDP, UNEP, ECA, ESCAP, ESCWA, UNDRO, FAO, WFP, World Bank, HABITAT, UNESCO, WMO	Department of Economic and Social Development, UNDP, UNEP, UNU, ECA, ESCAP, UNESCO, WMO, FAO, WFP, World Bank	Department of Economic and Social Development, UNDP, UNEP, ECA, ECLAC, ESCAP, ESCWA, WFP, UNESCO, WMO, World Bank, HABITAT
7 Ground water development	Department of Economic and Social Development, UNDP, UNEP, UNU, ECA, ESCAP, FAO, WFP, World Bank	Department of Economic and Social Development, UNDP, UNEP, UNICEF, UNU, ECA, ESCAP, WHO, WFP, World Bank, HABITAT	UNDP, UNEP, ECA, World Bank, HABITAT, UNIDO				Department of Economic and Social Development, UNDP, UNEP, ECA, ESCAP, UNESCO, WMO, FAO, WFP, World Bank	Department of Economic and Social Development, UNDP, UNEP, ECA, ESCAP, ESCWA, WFP, World Bank, HABITAT, UNESCO, WMO
8 Waste water reuse	Department of Economic and Social Development, UNDP, UNEP, UNU, ECA, ECE, FAO, World Bank	Department of Economic and Social Development, UNDP, WHO	UNDP, ECA, ECE, WHO, World Bank, HABITAT				UNDP, UNEP, UNU, ESCAP	Department of Economic and Social Development, UNDP, ECA, ECE, ECLAC, ESCAP, ESCWA, HABITAT, UNESCO, WMO
9 Integrated water resources management	Department of Economic and Social Development, UNDP, UNEP, UNU, ECA, ECE, ESCAP, FAO, WHO, WFP, World Bank	Department of Economic and Social Development, UNDP, UNEP, ECA, ECE, ESCAP, WHO, WFP, World Bank, HABITAT	Department of Economic and Social Development, UNDP, UNEP, ECA, ECE, ESCAP, WHO, World Bank, HABITAT	Department of Economic and Social Development, UNDP, ECA, ECE, World Bank	UNDP, ECA, ECE, ESCAP, World Bank	Department of Economic and Social Development, UNDP, UNEP, ECA, ECE, ESCAP, ESCWA, UNDRO, WFP, World Bank, HABITAT, UNESCO, WMO	Department of Economic and Social Development, UNDP, UNEP, UNU, ECA, ECE, ESCAP, UNESCO, FAO, WMO, WFP, World Bank	Department of Economic and Social Development, UNDP, UNEP, ECA, ECE, ECLAC, ESCAP, ESCWA, WFP, World Bank, WMO, UNESCO, HABITAT

Development and management functions	Sectors							
	Agricultural water use	Drinking water supply	Industrial water use	Hydropower	Navigation	Flood Control	Drought management	Multipurpose water use
10 Water use management	Department of Economic and Social Development, UNDP, UNEP, UNU, FAO, ECA, ECLAC, ESCAP, World Bank	Department of Economic and Social Development, UNDP, UNEP, UNU, ECA, ECLAC, ESCAP, INSTRAW, WHO, World Bank, HABITAT	Department of Economic and Social Development, UNDP, UNEP, ECA, ECLAC, ESCAP, World Bank, HABITAT, UNIDO	UNDP, ECA, ESCAP, ECLAC, INSTRAW, World Bank	UNDP, ECA, ECLAC, World Bank	UNDP, UNEP, ECA, ECLAC, ESCAP, FAO, UNESCO, WMO, World Bank	UNDP, UNEP, UNU, ECA, ECLAC, ESCAP, FAO, World Bank, UNESCO, WMO	Department of Economic and Social Development, UNDP, UNEP, UNU, ECA, ECLAC, ESCAP, INSTRAW, UNESCO, WMO, World Bank, HABITAT
11 Waste water management	UNDP, UNEP, ECA, ECE, FAO, WHO, WFP	UNDP, UNEP, ECA, WHO, World Bank, HABITAT	UNDP, UNEP, ECA, ECE, WHO, World Bank, HABITAT, UNIDO					UNDP, ECA, ECE, ECLAC, ESCAP, ESCWA, WMO, HABITAT, UNESCO, UNIDO
12 Strengthening of institutions	UNDP, UNEP, UNU, ECA, ECLAC, FAO, World Bank	UNDP, UNEP, UNICEF, UNU, ECA, ESCAP, ECLAC, WHO, World Bank, HABITAT	UNDP, UNEP, UNU, ECA, ECLAC, World Bank, HABITAT	UNDP, UNU, ECA, ECLAC, World Bank	UNDP, ECA, ESCAP	UNDP, UNU, ECA, ECLAC, ESCAP, World Bank, HABITAT, UNESCO, WMO	UNDP, UNU, ECA, ECLAC, UNESCO, FAO, WMO, World Bank	UNDP, UNEP, UNU, ECA, ECLAC, ESCAP, ESCWA, World Bank, HABITAT, UNESCO, WMO
13 Legislation	Department of Economic and Social Development, UNDP, UNU, ECA, ECE, FAO	Department of Economic and Social Development, UNDP, UNU, ECA, ECE, WHO, HABITAT	Department of Economic and Social Development, UNDP, ECA, ECE	Department of Economic and Social Development, UNDP, UNU, ECA, ECE	UNDP, ECA, ECE, ESCAP	UNDP, UNU, ECA, ESCAP, UNDRO, FAO, HABITAT	UNDP, UNU, ECA, FAO	Department of Economic and Social Development, UNDP, UNEP, UNU, ECA, ECE, ECLAC, ESCAP, ESCWA, FAO, World Bank, HABITAT
14 Education and training	UNDP, UNEP, UNU, ECA, INSTRAW, FAO, WHO, WFP, World Bank	Department of Economic and Social Development, UNDP, UNEP, UNICEF, UNU, ECA, ESCAP, INSTRAW, WHO, World Bank, HABITAT	UNDP, UNEP, ECA, WHO, World Bank	UNDP, UNU, ECA, INSTRAW, UNESCO, World Bank	Department of Economic and Social Development, UNDP, ECA, ESCAP	UNDP, ECA, ESCAP, UNDRO, WFP, UNESCO, WMO, World Bank, HABITAT	UNDP, UNU, ECA, ESCAP, FAO, WFP, UNESCO, WMO, World Bank	UNDP, UNEP, UNU, ECA, ECLAC, ESCAP, INSTRAW, UNESCO, WMO, World Bank, HABITAT

	Development and management functions	Sectors							
		Agricultural water use	Drinking water supply	Industrial water use	Hydropower	Navigation	Flood Control	Drought management	Multipurpose water use
15	Human resources development	UNDP, UNEP, UNU, ECA, INSTRAW, FAO, WHO, World Bank	Department of Economic and Social Development, UNDP, UNEP, UNICEF, ECA, ESCAP, INSTRAW, WHO, World Bank, HABITAT	UNDP, UNU, ECA, World Bank, HABITAT	UNDP, UNU, ECA, World Bank	UNDP, ECA, ESCAP	UNDP, ECA, ESCAP, UNDRO, World Bank, HABITAT, UNESCO, WMO	Department of Economic and Social Development, UNDP, UNU, ECA, ESCAP, UNESCO, FAO, WMO, World Bank	UNDP, UNEP, UNU, ECA, ESCAP, INSTRAW, World Bank, HABITAT, UNESCO, WMO

Annex II

OTHER ARRANGEMENTS FOR SYSTEM-WIDE COORDINATION

Name	Scope	Organizations involved	Terms of agreement
Working Agreement in the Field of Hydrology and the Long-term Cooperation between the Secretariats of UNESCO and WMO	Long-term cooperation in the field of hydrology	UNESCO and WMO	1. Maintain and develop collaboration throughout the field of hydrology 2. Establish close cooperation with their respective hydrology programmes (OHP of WMO and IHP of UNESCO)
FAO/WMO Working Agreement in the Field of Hydrology and Water Resources	Hydrology and its application to agriculture	FAO and WMO	General division of responsibilities between the two organizations for the collection and analysis hydrological and meteorological data
WHO/FAO/UNEP Memorandum of Understanding Concerning Water-borne Diseases in Agricultural Water Development	Establishes procedures for collaboration and joint action for the prevention and control of vector-borne diseases	FAO, WHO, UNEP. It also provides for cooperation with other organizations	1. Hold meetings to examine programme activities and identify measures 2. Exchange of information, project data, country briefs, (profiles) 3. Prepare guidelines and training
FAO/WHO Memorandum of Understanding concerning Rural Water Supply and Agricultural Development	Training of rural extension workers and integration of rural water supply and sanitation in rural development programmes	FAO and WHO, with provision for cooperation with other organizations	1. Joint planning and implementation of projects involving domestic water supply and irrigation in rural areas 2. Undertake studies and training on the application of appropriate technology and benefits from rural water supply and sanitation
FAO/UNESCO Intersecretariat arrangement in Hydrology and Water Resources	Programmes related to hydrology and water resources development	FAO, UNESCO	1. Regular consultations to harmonize planning of programmes of work in common areas 2. Exchange of advice and information in hydrology and water resources
UNIDO/UNEP Joint Committee	Coordination of work relating to industrial use of water and environmental aspects of industrial development	UNIDO, UNEP	The Committee meets annually to coordinate activities
ECA's Interagency Group for Water Resources Activities	Entire field of water resources	ECA, organizations of the United Nations system, African Development Bank, river basin organizations	Interorganizational cooperation at the regional level

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Name	Scope	Organizations involved	Terms of agreement
Designated Official for Environmental Matters (DOEM)	Coordination of system-wide activities in the field of environment, including those related to water resources development	All organizations concerned	DOEMs meet to promote interorganizational cooperation
FAO/World Food Programme	Supply food for projects promoting social and economic development, including irrigation	FAO and World Food Programme	Mobilize and distribute supplies and food for human resources development in child-feeding and school lunch programmes; infrastructure
World Bank/FAO Cooperative Programme	Project identification and preparation for investment in agriculture	World Bank and FAO	Combining of staff resources and experience in the identification and preparation of investment projects for World Bank financing; FAO's contribution is made through its investment centre
World Bank/UNESCO Cooperative Programme	Project identification for investment in the education sector	World Bank and UNESCO	Joint undertaking of evaluation and project preparation in the field of education
World Bank/WHO Working Agreement in Water Supply and Sanitation	Pre-investment activities relative to water supply, waste disposal and storm drainage	WHO and World Bank	Joint undertaking of pre-investment studies and missions to developing countries of common membership
World Bank/UNIDO	Project identification and preparation of labour-intensive small-scale industries	World Bank and UNIDO	Joint studies and missions to evaluate and prepare projects, with special emphasis on support of employment-intensive, small-scale manufacturing and construction industries, including small-scale hydropower plants
World Bank/IFAD Working Agreement	Preparation and appraisal of agricultural and rural development projects	World Bank and IFAD	Assistance by the World Bank in the preparation, appraisal, evaluation and supervision of projects for financing by IFAD or for cofinancing by IFAD and the World Bank

Annex III

MEETINGS, SEMINARS, SYMPOSIA AND CONFERENCES HELD DURING 1990-1992

Organization	Title, dates, venues
	1990
ECE	Seminar on Wastewater Management, 21-25 May 1990, Munich, Germany.
UNESCO	International Symposium on Water Systems Analysis, 12-15 June 1990, Winnipeg, Canada.
WMO	WMO Commission on Health and Environment, 19-21 June 1990, Geneva, Switzerland.
UNESCO	International Conference on Calibration and Reliability in Groundwater Modelling, 3-6 September 1990, The Hague, Netherlands.
UNEP	4th International Conference on the Conservation and Management of Lakes, 5-9 September 1990, Hangzou, China.
UNDP, United Nations system	Global Consultation on Safe Water and Sanitation for the 1990s, 8-9 September 1990, New Delhi, India.
Department of Technical Cooperation for Development of the United Nations Secretariat	Interregional Seminar on the Mobilization of Resources for Optimal Water Development Allocation and Conservation, 3-7 December 1990, Merida, Mexico.
	1991
ESCAP	Eighteenth session of the Panel on Tropical Cyclones, 29 January-4 February 1991, Male, Maldives.
ESCAP, UNDRO	Regional Symposium on the International Decade for Natural Disaster Reduction, 11-15 February 1991, Bangkok, Thailand.
ECE	Work Session on Water Use and Discharge Statistics, 14-16 February 1991, Geneva, Switzerland.
UNESCO	2nd International Conference on Computer Methods and Water Resources, 18-22 February 1991, Marrakech, Morocco.
UNESCO	Southern Africa FRIEND - 1st Coordinating Meeting, 20-22 February 1991, Harare, Zimbabwe.
WHO	Meeting of the Operational and Maintenance Advisory Committee, 26 February-1 March 1991, Geneva, Switzerland.
UNESCO, IAEA	Symposium on the Use of Nuclear Techniques in Water Resources Development, 11-15 March 1991, Vienna, Austria.
IAEA	International Symposium on Isotope Techniques in Water Resources Assessment, 11-15 March 1991, Vienna, Austria.
WHO	WHO Commission on Health and Environment - 2nd meeting, 18-22 March 1991, Geneva, Switzerland.
UNICEF, WHO	UNICEF/WHO Pre-Test Workshop, 2-5 April 1991, Geneva, Switzerland.
ECE	2nd Consultation of the Government Rapporteurs on the Protection of Inland Waters Against Eutrophication, 15-17 April 1991, Geneva, Switzerland

Organization	Title, dates, venues
UNESCO	International Symposium on Hydrology and Water Resources Education and Training, 15-19 April 1991, Chihuahua, Mexico.
Department of Technical Cooperation for Development	Workshop on Aquifer Overexploitation in Developing Countries, 20-24 April 1991, Canary Islands, Spain.
WHO	2nd Consultation of the WHO Working Group on Water, Sanitation and Health, 9-11 April 1991, Geneva, Switzerland.
UNESCO	Seminar on Aquifer Vulnerability Mapping, 22-26 April 1991, Tampa, Florida, United States.
ECE	Fourth special session of the Working Party on Water Problems, 29 April-3 May 1991, Geneva, Switzerland.
ESCAP	Workshop on Forecasting, Preparedness and Other Operational Measures for Water-related Natural Disaster Reduction, 29 April-3 May 1991, Bangkok, Thailand.
UNESCO	4th International Symposium on Land Subsidence, 12-18 May 1991, Houston, Texas, United States.
UNESCO	Subregional Symposium on Efficient Water Uses and Conservation for Survival, 27-29 May 1991, Tunis, Tunisia.
ECE	Seminar on Ecosystems Approach to Water Management, 27-31 May 1991, Oslo, Norway.
UNDP, United Nations system	International Symposium on Capacity-building for Water Resources Utilization, 3-5 June 1991, Delft, Netherlands.
ECE	2nd Consultation of the Government Rapporteurs on Water Quality Objectives and Criteria, 4-6 June 1991, Geneva, Switzerland.
ECE	1st Meeting of the Task Force on the Prevention and Control of Water Pollution from Fertilizers and Pesticides, 13-15 June 1991, Berlin, Germany.
WHO	Revision of the WHO Guidelines for Drinking-Water Quality. Review Meeting on Pathogenic Agents and volume III on Surveillance of Community Supplies, 24-28 June 1991, Harare, Zimbabwe.
UNEP	Support Research and Training in the Assessment of the Water-Climate System in the Amazon Basin under the Impact of Large-scale Land Use Changes, August 1991, Manaus, Brazil.
WMO	Water Quality Workshop, 26-30 August 1991, Bratslava, Czechoslovakia.
UNESCO	Management of Information in Science and Technology, 2 September-29 November 1991, Brussels, Belgium.
Department of Technical Cooperation for Development, INSTRAW	Workshop on Testing Training Modules on Women, Water Supply and Sanitation, 2-6 September 1991, Banjul, Gambia.
WHO	2nd Consultation of the FAO/WHO Working Group on Legal Aspects of Water Resources, Water Supply and Wastewater Management, 10-12 September 1991, Geneva, Switzerland.
WHO	1st Interregional Workshop on the Promotion of Environmental Management for Vector Control through Agriculture Extension Programmes, 23-26 September 1991, Alexandria, Egypt.

Organization	Title, dates, venues
UNESCO, WMO, ECA	Technical Conference on Hydrological Services in Africa, 30 September-4 October 1991, Addis Ababa, Ethiopia.
Department of Technical Cooperation for Development	International Seminar on Environmental Aspects of Water Resources Development, 7-16 October 1991, Assenovgrad, Soviet Union.
ECE	Fifth special session of the Working Party on Water Problems, 14-17 October 1991, Geneva, Switzerland.
ECE	Special session of the Working Party on Water Problems to Elaborate the Draft Convention on the Protection and Use of Transboundary Water Pollution from Fertilizers and Pesticides, 13-15 October 1991, Berlin, Germany.
WHO	11th meeting of the Joint WHO/FAO/UNEP/UNCHS Panel of Experts on Environmental Management for Vector Control (PEEM), 21-25 October 1991, Kuala Lumpur, Malaysia.
WHO	2nd Interregional Workshop on the Promotion of Environmental Management for Disease Control through Agricultural Extension Programmes, 28-31 October 1991, Bangkok, Thailand.
ESCAP	Workshop on Sustainable and Environmentally Sound Development of Water Resources, 28 October-1 November 1991, Bangkok, Thailand.
ECLAC	Seminar/Workshop on Model Programmes for Integral Water Resources Management in Central America, Panama and the Dominican Republic, 4-6 December 1991, San Jose, Costa Rica.
UNESCO	3rd International Seminar on Information Related to Water and the Environment, 14-15 November 1991, Brussels, Belgium.
ECE	Meeting on Statistics of Water Quality, 9-12 December 1991, Geneva, Switzerland.
UNESCO	International Symposium on Water System Analysis, Canada.
UNESCO	Regional Seminar on Mapping Groundwater Resources and their Vulnerability, Paris, France.
UNESCO, IAEA	Application of Nuclear Techniques in Hydrology, Vienna, Austria.
UNESCO	Symposium/Workshop on the Role of Vegetation in the Hydrological Cycle, Paris, France.
	1992
United Nations system	International Conference on Water and the Environment, 26-31 January 1992, Dublin, Ireland.
ESCAP, WMO	1st joint session of the Typhoon Committee and the Panel on Tropical Cyclones, 18-27 February 1992, Pataya, Thailand.
ECE	Fifth session of the Senior Advisers to ECE Governments on Environmental Water Problems, 2-6 March 1992, Geneva, Switzerland.
ECE	Fifth resumed session of the Senior Advisers to ECE Governments on Environmental and Water Problems, 17-18 March 1992, Helsinki, Finland.
WMO	2nd planning meeting on GRID Estimation Runoff Data, 6-9 April 1992, Warsaw, Poland.
WHO	GEMS/Water Workshop on Water Quality Monitoring and Assessment, 23 March-3 April 1992, Arusha, United Republic of Tanzania.

Organization	Title, dates, venues
WHO	GEMS/Water Expert Review Meeting of the Raison/GEMS Data System, 11-15 May 1992, Burlington, Canada.
UNESCO	5th International Symposium on River Sedimentation, 6-10 April 1992, Karlsruhe, Germany.
WHO	3rd Interregional Workshop on the Promotion of Environmental Management for Disease Vector Control Through Agricultural Extension Programmes, 20-23 April 1992, San Jose, Costa Rica.
UNESCO	Seminar on Mathematical Modelling of Alluvial Rivers, 14-18 April 1992, Kathmandu, Nepal.
UNESCO	IAH and International Hydrology in the 1990s and Beyond, 30 April-1 May 1992, Prague, Czechoslovakia.
UNESCO	International Symposium on Transboundary River Basin Management and Sustainable Development, 18-22 May 1992, Delft, Netherlands.
WHO	Review of Training Package on Operation and Maintenance of Rural Water Supply and Sanitation Facilities, 1-3 June 1992, Geneva, Switzerland.
WHO	Advisory Committee of the Operation and Maintenance Working Group, 4-5 June 1992, Geneva, Switzerland.
WHO	Third Consultation of the WHO Working Group on Water Sanitation and Health.
ECE	Consultation of Governmentally Designed Experts on Ecosystems-based Water Management, 1-5 June 1992, Oslo, Norway.
United Nations system	United Nations Conference on Environment and Development, 3-14 June 1992, Rio de Janeiro, Brazil.
WMO	Workshop on Global Runoff Data Centre, 15-17 June 1992, Koblenz, Germany.
ECE	3rd meeting of the Task Force on the Prevention and Control of Pollution from Fertilizers and Pesticides, 16-18 June 1992, Berlin, Germany.
Department of Economic and Social Development, UNDP, UNDRO	International Workshop on Flood Mitigation, Emergency Preparedness and Flood Disaster Management in Viet Nam, 22-24 July 1992, Hanoi, Viet Nam.
UNESCO	Workshop on Advances in Distributed Hydrological Models, 25-26 June 1992, Bergamo, Italy.
WHO	15th meeting of the PEEM Steering Committee, June 1992, Manila, Philippines.
UNESCO, IAHS	UNESCO/IAHS Scientific Colloquium on Space-Time Scale Variability and Interdependence for Various Hydrological Processes, 3-4 July 1992, Paris, France.
UNESCO	Tenth session of the Intergovernmental Council of the IHP, 6-11 July 1992, Paris, France.
UNESCO	Meeting on Biodiversity and Land/Inland Water Ecotones, 23-30 August 1992, Barcelona, Spain.
UNESCO	Meeting of Sub-Network on Fish and Land/Inland Ecotones, 31 August-4 September 1992, Paris, France.
WHO	PEEM Collaborating Centre Meeting, join PEEM/DBL/BRI Training Course on Health Opportunities in Water Resources Development, 31 August-4 September 1992, Harare, Zimbabwe.
UNESCO	Workshop on Hydrological Impact of Nuclear Power Plant Systems, 23-25 September 1992, Paris, France.
UNESCO	International Workshop on Biodegradation of Toxic Contaminants in Groundwater, September 1992, Canada.

Organization	Title, dates, venues
Department of Economic and Social Development	United Nations Interregional Workshop on the Role of Women in Environmentally Sound and Sustainable Development, 9-15 September 1992, Beijing, China.
WHO	Third Consultation of the FAO/WHO Working Group on Legal Aspects of Water Resources, Water Supply and Wastewater Management, 14-16 September 1992, Rome, Italy.
IAEA	Consultant Meeting on the Application of Isotopes in Arid Zones, 14-17 September 1992, Vienna, Austria.
ESCAP	Workshop on Testing Modules on Women, Water Supply and Sanitation, 21-25 September 1992, Bangkok, Thailand.
UNESCO	International Workshop on Biodegradation of Toxic Contaminants in Groundwater, September 1992, Canada.
UNESCO	International Symposium on Snow and Glacier Hydrology, 16-21 November 1992, Kathmandu, Nepal.
WHO	Ninth session of the Commission on Hydrology, 12-24 October 1992, Jamaica.
WHO	International Workshop on the Role of Communities in the Management of Improved Water Supply Systems, 4-10 November 1992, The Hague, Netherlands.
WHO	Workshop on WCP-Water Project A.2, 9-13 November 1992, Geneva, Switzerland.
Department of Economic and Social Development, UNDP, UNEP	Consultative Forum on Social, Economic and Environmental Impacts of Water Management, 11-13 November 1992, Geneva, Switzerland.
ECLAC/German Agency for Technical Cooperation	Curso de Postgrado en Gestion Integral se los Recursos Hidricos, 28 September-23 October 1992, Mendoza, Argentina.